REP 1994 - 087

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224 Assessing the Hazard to Granivorous Birds Feeding on Chemically Treated Seeds. Michael L. Avery, USDA, Denver Wildlife Research Center, Gainesville, FL; Thomas M. Primus, USDA, Denver Wildlife Research Center, Denver, CO; and David L. Fischer, Miles Inc., Stilwell, KS. Many seed-eating birds are exposed to potentially harmful insecticidal and fungicidal seed treatments. Current models for evaluating hazards to seed-eating birds are based on estimated exposure per unit area and assume that birds ingest all of the chemical on the treated seed. In an earlier study, however, it was determined that red-winged blackbirds (Agelaius phoeniceus) removed only about 15% of an insecticidal treatment applied to individual rice seeds. Here, we extend those findings by examining the seed-handling behavior of small (15-30 g) and medium-sized (35-65 g) passerines exposed to various types of insecticides- or fungicides-treated seeds. From the chemical residues on seed hulls after birds feed on the treated seed, we calculate the amount of chemical removed during feeding. These data are then used to develop exposure models based on species-typical feeding rates and behavior.